

Report Date: 02 Sep 2014

Summary Report for Individual Task
091-94E-1302
Repair Receiver-Transmitter RT-(*)/ARC-186(V)(*)
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD5 - This product/publication has been reviewed by the product developers in coordination with the installation/activity name foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

Condition: In an operational environment, a non-mission capable RT-(*)/ARC-186(V) has been turned in to your Shop. Your supervisor has directed you to restore the receiver-transmitter to operational status, given the following: Receiver-Transmitter RT-(*)/ARC-186(V); Power Supply, PP-1104(*); Signal Generator, SG-1207/U; Digital Multimeter, AN/USM-486; Headset-Microphone, H-157A/AIC; Attenuators, 6-dB and 30-dB; static work station, NSN 4940-01-087-3458; Tool Kit, TK-105A/G; applicable repair parts; TM 11-5821-318-30; TM 11-5821-318-30P; TM 11-6625-3300-10; DA Form 2404, Equipment Inspection and Maintenance Worksheet; DA Form 2407, Maintenance Request; DA Pam 750-8, The Army Maintenance Management System (TAMMS) Users Manual; TB 385-4, Safety Requirements for Maintenance Of Electrical And Electronic Equipmet and Local Standard Operating Procedure (SOP).NOTE: If any of the above equipment is obsolete or not available, use equivalent equipment. This task should not be trained in MOPP 4.

Standard: Restore the receiver-transmitter to operational status in accordance with references listed in the performance measures.

Special Condition: None

Safety Risk: Low

MOPP 4: Never

Task Statements

Cue: Your supervisor has directed you to restore the receiver-transmitter to operational status.

DANGER

DEATH ON CONTACT may result if personnel fail to observe safety precautions.

Never work on electronic equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid. When the technicians are aided by operators, they must be warned about dangerous areas.

Whenever possible, the power supply to the equipment must be shut off before beginning work on the equipment. Take particular care to ground every capacitor likely to hold a dangerous potential. When working inside the equipment, after the power has been turned off, always ground every part before touching it.

Be careful not to contact high-voltage connections or 115 volt ac input connections when installing or operating this equipment. Whenever the nature of the operation permits, keep one hand away from the equipment to reduce the hazard of current flowing through the body.

WARNING

Do not be misled by the term "low voltage." Potentials as low as 50 volts may cause death under adverse conditions.

CAUTION

None

Remarks: None

Notes: None

Performance Steps

Cue: Your supervisor has directed you to restore the receiver-transmitter to operational status.

1. Obtain required tools and test equipment in accordance with TM 11-5821-318-30.
2. Complete appropriate blocks on DA Form 2407. (DA PAM 750-8)
3. Perform visual inspection.
4. Connect test equipment.
5. Perform operational check.
6. Proceed to PS #12 if Radio Control Set passes operational check, if not continue to PS #7.
7. Perform troubleshooting procedures.
8. Identify the defective module(s), circuit card(s), or component(s).
9. Replace the defective module(s), circuit card(s), or component(s).
10. Verify the repair with QA/QC.
11. Repeat operational Check PS #5.
12. Complete DA Form 2407. (Refer to DA Pam 750-8)
13. Tag defective part(s) for turn in.
14. Request final inspection. (Refer to local SOP.)

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO-GO if any performance measure is failed (F). If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

Evaluation Preparation: Ensure all items required in the condition statement (or appropriate substitutions) are on hand and all safety requirements are met.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Obtained the required tools and test equipment.			
2. Completed appropriate blocks on DA Form 2407.			
3. Performed visual inspection.			
4. Connected test equipment.			
5. Performed operational check.			
6. Proceeded to PM 12 if radio passed operational check.			
7. Performed troubleshooting procedures.			
8. Identified the defective part(s).			
9. Replaced the defective part(s).			
10. Repair verified by QA/QC.			
11. Repeated operational Check PS #5.			
12. Completed DA Form 2407.			
13. Tagged defective part(s) for turn in.			
14. Requested final inspection. (Refer to local SOP.)			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	DA FORM 2404	EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET	No	No
	DA FORM 2407	MAINTENANCE REQUEST	Yes	No
	LOCAL SOP	LOCAL SOP	Yes	No
	PAM 750-8	The Army Maintenance Management System (TAMMS) Users Manual.	Yes	No
	TB 385-4	SAFETY REQUIREMENTS FOR MAINTENANCE OF ELECTRICAL AND ELECTRONIC EQUIPMENT	Yes	No
	TM 11-5821-318-30	AVIATION INTERMEDIATE MAINTENANCE MANUAL FOR VHF AM/FM RADIO SET, AN/ARC-186(V) (NSN 5821-01-086-6243) (REPRINTED W/BASIC INCL C1-5)	Yes	No
	TM 11-5821-318-30P	DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL REPAIR PARTS AND SPECIAL TOOL LISTS FOR RECEIVER - TRANSMITTER, RT-1354/ARC 186(V) (NSN 5821-01-092-4907)	Yes	No
	TM 11-6625-3300-10	Technical Manual Operator's Manual for Plug-in Unit, Electronic Test Equipment	No	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. It is the responsibility of every Soldier and DA civilian to protect the environment from damage. All operations must conform to the Army Environmental Program, TC 3-34.489 (The Soldier and the Environment), FM 3-34.5 (Environmental Considerations), and local, state, and federal environmental policies, the Clean Air Act (CAA), CAA amendments, National Ambient Air-Quality Standards (NAAQS), as well as Occupational Safety and Health Administration (OSHA), Hazard Communication Standard for Industry, 29 CFR, part 1910.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed

during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. Incidental to Army operations and activities, all operations must provide for public safety, safe and healthful work places, procedures, and equipment. Observe all safety precautions when using lifting devices and handling heavy parts. Observe all safety and/or environmental precautions regarding electricity, radiation, radio frequency (RF), fuel, lubricants, high pressures, and refrigerants. Provide ventilation for exhaust fumes during equipment operation and use hearing protection when required in accordance with AR 385-10, (The Army Safety Program) the Clean Air Act (CAA), CAA amendments, National Ambient Air-Quality Standards (NAAQS), and the Occupational Safety and Health Administration (OSHA) Hazard Communication standard.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks : None